

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic apparatus comprising:
~~an illuminator configured to provide a beam of radiation;~~
a support structure configured to hold a patterning device, the patterning device configured to impart a the beam of radiation with a pattern in its cross-section;
a substrate table configured to hold a substrate;
a projection system configured to project the patterned beam onto a target portion of the substrate; and
a liquid supply system configured to supply a liquid to substantially only a localized area of the substrate, of the substrate table, or of both, to at least partly fill a space between the projection system and the substrate, the substrate table, or both,
wherein the localized area is less than the area of a surface of the whole substrate, and
wherein the substrate table comprises a barrier configured to collect liquid, the barrier surrounding and spaced apart from the substrate and comprising a projection which projects out above an upper surface of the substrate table.
2. (Currently Amended) The apparatus of claim 1, wherein the ~~barrier comprises a projection which projects out of~~ the an upper surface of the substrate table.
3. (Original) The apparatus of claim 1, wherein at least a part of the barrier comprises a liquidphillic material or coating.
4. (Currently Amended) The apparatus of claim 1, wherein the barrier further comprises a groove recessed into an upper surface of the substrate table.
5. (Original) The apparatus of claim 4, wherein the groove is sized such that the liquid can be transported along the groove under capillary action.

6. (Withdrawn) The apparatus of claim 4, wherein the substrate table further comprises a chamber in liquid contact with the upper surface via the groove and wherein the groove forms a continuous loop.

7. (Original) The apparatus of claim 1, further comprising a low pressure supply configured to remove liquid from the barrier.

8. (Original) The apparatus of claim 7, wherein the low pressure supply comprises a plurality of discrete outlets.

9. (Original) The apparatus of claim 7, wherein the low pressure supply operates independently of the liquid supply system.

10. (Original) The apparatus of claim 1, further comprising a surface acoustic wave generator configured to generate surface acoustic waves in the barrier to facilitate transport of liquid along the barrier.

11. (Original) The apparatus of claim 10, wherein the surface acoustic wave generator comprises a piezoelectric actuator.

12. (Currently Amended) The apparatus of claim 1, wherein the barrier further comprises a groove and the a projection ~~which~~ projects out of the ~~an~~ upper surface of the substrate table.

13. (Withdrawn) The apparatus of claim 12, wherein the substrate table comprises a chamber in liquid contact with the upper surface via the groove.

14. (Withdrawn) The apparatus of claim 13, wherein the chamber is at least partly formed in the projection.

15. (Currently Amended) The apparatus of claim 1, wherein the barrier is positioned radially outwardly of a drainage ditch or an additional barrier, surrounding an outer peripheral edge of the substrate.

16. (Original) The apparatus of claim 1, wherein the barrier extends substantially around an outer edge or portion of the substrate table.

17. (Original) The apparatus of claim 1, wherein the barrier additionally surrounds areas of an upper surface of the substrate table which are not covered by the substrate.

18. (Original) The apparatus of claim 1, wherein the barrier additionally surrounds at least one sensor mounted on an upper surface of the substrate table and/or a closure member configured to seal the liquid supply system.

19. (Currently Amended) A device manufacturing method comprising:
providing a liquid to substantially only a localized area of a substrate, of a substrate table, or of both, to at least partly fill a space between a projection system and the substrate, the substrate table, or both;

projecting a patterned beam of radiation through the liquid onto a target portion of the substrate using the projection system; and

collecting liquid with a barrier, the barrier surrounding and spaced apart from the substrate and comprising a projection which projects out above an upper surface of the substrate table,

wherein the localized area is less than the area of a surface of the whole substrate.

20. (Currently Amended) The method of claim 19, wherein the ~~barrier comprises a projection which projects out of~~ the an upper surface of the substrate table.

21. (Currently Amended) The method of claim 19, wherein the barrier further comprises a groove recessed into an upper surface of the substrate table.

22. (Original) The method of claim 19, further comprising removing liquid from the barrier using a low pressure supply.

23. (Original) The method of claim 22, wherein removing liquid from the barrier operates independently of providing the liquid.

24. (Original) The method of claim 19, further comprising generating surface acoustic waves in the barrier to facilitate transport of liquid along the barrier.

25. (Currently Amended) The method of claim 19, wherein the barrier further comprises a groove and the a-projection ~~which~~-projects out of the ~~an~~-upper surface of the substrate table.

26. (Withdrawn) The method of claim 25, wherein the substrate table comprises a chamber at least partly formed in the projection and in liquid contact with the upper surface via the groove.

27. (Currently Amended) The method of claim 19, further comprising removing liquid using a drainage ditch or an additional barrier, surrounding an outer peripheral edge of the substrate and positioned radially inwardly of the barrier.

28. (New) A lithographic apparatus comprising:
a support structure configured to hold a patterning device, the patterning device configured to impart a beam of radiation with a pattern in its cross-section;
a substrate table configured to hold a substrate;
a projection system configured to project the patterned beam onto a target portion of the substrate; and
a liquid supply system configured to supply a liquid to substantially only a localized area of the substrate, of the substrate table, or of both, to at least partly fill a space between the projection system and the substrate, the substrate table, or both,
wherein the localized area is less than the area of a surface of the whole substrate, and

wherein the substrate table comprises a first barrier configured to collect liquid, the first barrier surrounding and spaced apart from the substrate and positioned radially outwardly of a second barrier surrounding an outer peripheral edge of the substrate.

29. (New) The apparatus of claim 28, wherein at least a part of the first barrier comprises a liquidphillic material or coating.

30. (New) The apparatus of claim 28, wherein the first barrier comprises a groove recessed into an upper surface of the substrate table.

31. (New - Withdrawn) The apparatus of claim 30, wherein the substrate table further comprises a chamber in liquid contact with an upper surface of the substrate table via the groove and wherein the groove forms a continuous loop.

32. (New) The apparatus of claim 28, wherein the first barrier comprises a projection which projects out above an upper surface of the substrate table.

33. (New - Withdrawn) The apparatus of claim 32, wherein the substrate table further comprises a chamber at least partly formed in the projection, the chamber in liquid contact with an upper surface of the substrate.

34. (New) The apparatus of claim 28, further comprising a low pressure supply configured to remove liquid from the first barrier.

35. (New) The apparatus of claim 28, wherein the first barrier extends substantially around an outer edge or portion of the substrate table.

36. (New) The apparatus of claim 28, wherein the first barrier additionally surrounds a sensor mounted on an upper surface of the substrate table and/or a closure member configured to seal the liquid supply system.